



Price \$1.00

June 1982

SATURDAY, June 18th, 1982

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FROM THE PREZ

## DISPLAYING BUSINESS FORMS

BRING YOUR PROGRAMS FOR THE CLUB LIBRARY

HELP IDENTIFY GOOD ATARI SOFTWARE  
(and/or bad)

FILL IN THE QUESTIONNAIRE IN THIS ISSUE

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## WHAT'S HAPPENING AT THE JUNE MEETING

BEGINNERS BASIC CLASS

Our education, Linda Scott, will be conducting a class on BASIC for beginners at before our regular meeting on Saturday. The class begins at 3PM. Be sure to bring your *ATARI* Basic manuals.

Notes from the CES

Several members of our club had the opportunity to attend the Consumers Electronics Show in Chicago. They will share this trip with us.



## MILATARI NEWSLETTER

### UNCLASSIFIED ADS

(MILATARI will post ads for its members at no charge. Others \$1.00 per issue. Send ad info to newsletter editor by 1st Saturday of month)

**WANTED:** Articles for this newsletter. How about it gals and guys? Send your ideas, programs, reviews, hot tips, whatever to the editor.

**SCORE KEEPER:** The MILATARI club needs a score keeper to keep track of ours clubs high scoring members. See me at the next meeting or give me a call to volunteer -- editor

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### DISPLAYING BUSINESS FORMS

by Douglas Crockford

(Editors note: Doug is the editor of the *The Newsletter of the ATARI Computer Association of Orange County*. He wrote this article for their June 1982 issue.)

The screen is only 40 (or 38) characters wide. When you are displaying columnar data, you usually have to give up one character or more per column to separate the columns. This reduces the amount of information you can display.

But no longer! Now you can have up to eight vertical lines drawn between columns, and those lines will not take up a character position.

First, do these pokes:

POKE 53261,128  
POKE 53262,128  
POKE 53263,128  
POKE 53264,128  
POKE 53265,170  
POKE 623,1

Then, determine where you want the lines and do statements like

POKE 53248+L,X\*4+55

where L is a number between 0 and 7 and X is the position number where you want the line to appear. The lines will stay in place until you do a

POKE 53248+L,0.

This is using player/missile graphics to draw the lines. It requires no extra memory and does not consume any extra DMA time.

### FROM THE PREZ

from Gary Nolan

I have received a request from ATARI to update their list used when sending information to ATARI owners. This list is used by ATARI to mail the *ATARI CONNECTION* and the APX catalog.

If you are not receiving these publications from ATARI, be sure to let me have you name and address at the June meeting. If you are not going to be at the meeting, be sure and call me before the end of the month.

In another contact from ATARI, they have announced a contest to design a logo for ATARI users groups. Each club may enter 2 designs to ATARI. The designer of the winning design will be awarded the ATARI Communicator kit plus a \$350 credit on Comp-u-serv. I will explain the rules and our method of selecting entries at the meeting.

I have received the disks which were ordered at the last meeting. Please see me at the meeting to pick up yours. Please bring payment.

### SUPPORTING BUSINESSES

The following businesses offer a discount to members of MILATARI. You must show your valid MILATARI membership card to receive your discount.

MICROCOMPUTERS and MAGIC  
256 1/2 West Broadway Street  
Waukesha, Wis 53186  
(414)548-0700

MICROAGE COMPUTER STORE  
2675 North Mayfair Road  
Wauwatosa, Wis 53226  
(414)257-1100

LIBERTYVILLE VIDEO and COMPUTER CENTER  
Attn: Steve Singer  
Cambridge Plaza  
Libertyville, Ill 60048  
(312)367-8660



## MILATARI NEWSLETTER

### UPGRADING YOUR 10K OPERATING SYSTEM

by Ken Roser

In this article, I will describe the steps necessary to update your 10K operating system to the latest update, Revision B.

The parts necessary for the upgrade are available from Atari service centers. I purchased mine at the center in Somerset, NJ. There are 2 parts required. They are both Read Only Memory (ROM) integrated circuits. The part numbers are CO14599B and CO12499B. The B suffix in the part number is very important, as it specifies the revision number of the ROM. The cost of these ROMs is \$9.89 each as of this writing.

The installation of these parts is extremely simple, since they only replace two ROMs in the 10K operating system cartridge. The whole procedure should take you no longer than 30 minutes. Please read and understand each step entirely before attempting to do the work described in it.

Step 1-Make sure the power to your computer is turned off and unplug all cables.

Step 2-Remove the ribbed top of the computer per the instructions that can be found in your Atari 800 Operators Manual.

Step 3-Remove the 10K operating system cartridge from your computer.

Step 4-Remove the two screws on the cartridge that are on the side that describe possible memory configurations for your system.

Step 5-Per diagram #1, locate the 2 ROMs that have to be removed from their sockets. They are in sockets labeled A401 and A403. Also, look at the third ROM in socket A402. If its part number is not CO12399B, you have an older computer that will require one additional ROM change. If this is the case please see the appendix at the end of this article describing the additional work that must be done.

Step 6-After making sure you have grounded yourself, carefully remove these two ROMs from their sockets with either an IC removal tool or a small flat screwdriver. I found that the screwdriver works best. In order to get it under the ROMs, it is possible to slightly separate the two plastic pieces of the cartridge at the side of the gold contacts. Don't spread the pieces too far or you will damage the adhesive label that designates this cartridge.

Step 7-Per diagram #1, insert the ROM labeled CO14599B into socket A401 and the ROM labeled CO12499B into socket A403. Pay close attention to the fact that a small notch or semicircle on the ROMs must be lined up correctly. Also, make sure that none of the pins on the ROM are bent and not in the socket.

Step 8-Replace the cover on the cartridge and install the two screws removed previously.

Step 9-Insert the cartridge back into the computer.

Step 10-Replace the ribbed top of the computer per the instructions in the Atari 800 Operators manual.

Step 11-Reconnect cables and apply power to the computer.  
Step 12-Type in the short Basic program in listing #1. This program will be used to test if the 10K operating system cartridge is working properly.

Step 13-Run the program. The program will now read every location in the 10K operating system and calculate a checksum for the data. The checksum will be printed followed by either a "PASSED!" or a "FAILED" message. The correct checksum value for a revision B operating system is 235.

#### DIFFERENCES IN OLDER COMPUTERS

If you have an older computer you may have to replace the ROM in socket A402 with another updated ROM. Its part number is CO12399B. To do so, make the following changes to the procedure described in the article.

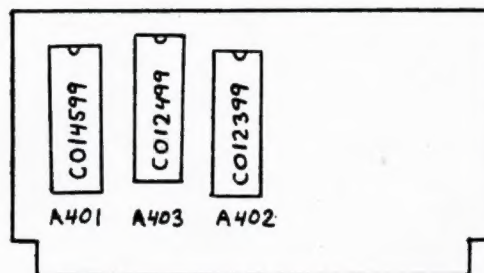
Step 6 -ADD THE FOLLOWING TEXT:Also, remove the ROM in socket A402.

Step 7- ADD THE FOLLOWING TEXT:Also, insert the CO12399B ROM into socket A402.

#### LISTING #1

```
10 REM CHECKSUM - REVISION B
20 REM by Kenneth Roser
30 REM This basic program calls a
40 REM machine language routine that
50 REM calculates the checksum of the
60 REM 10K operating system ROMs (Address $D800-$FFFF)
70 REM The correct checksum is 235
80 REM for rev. B operating systems.
90 CLR :DIM M$(1),M(29): GRAPHICS 0
100 PRINT "REVISION B OPERATING SYSTEM TEST"
110 PRINT:FOR Y=1 TO 29:READ N:POKE ADR(M$)+Y,N: NEXT Y
120 X=USR(ADR(M$)+1)
130 PRINT "Checksum is ";X
140 IF X=235 THEN PRINT "PASSED!"
150 IF X<>235 THEN PRINT "FAILED"
160 GOTO 230
170 DATA 169,216,133,204,169,0, 133,203,160,24,113,203
180 DATA 200,200,251,230,204,200, 247,141,212,0,169,0,
190 141,213,0,104,96
```

DIAGRAM 1  
OPERATING SYSTEM UPGRADE



PLACEMENT OF ROMS ON  
10K OPERATING SYSTEM  
CARTRIDGE





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MEMBERSHIP INFORMATION

Membership is open to individuals who have an interest in using and programming ATARI computers. The membership includes the subscription to this newsletter and free access to the users' program library. The membership fee is \$12.00 per year. Single newsletters are \$1.00. A guest may attend one meeting at no charge.



SOFTWARE EVALUATION FORM

(All software evaluations will become part of our library)

Your name \_\_\_\_\_

Program name \_\_\_\_\_

Where purchased \_\_\_\_\_ Price \_\_\_\_\_

Cassette or disk \_\_\_\_\_ Transferable to disk Y/N \_\_\_\_

Program language(circle) Machine/Basic/Assembler/Pascal/Other

Memory requirements \_\_\_\_\_K Require special hardware Y/N \_\_\_\_

Program requires: (circle all that apply)

PADDLES JOYSTICKS KEYBOARD PRINTER MODEM OTHER(specify)

If program is a game;

Time limit for game Y/N \_\_\_\_

Increasing difficulty Y/N \_\_\_\_

Multiple players Y/N \_\_\_\_ number of players \_\_\_\_

Quality of program:(circle) POOR FAIR GOOD EXCELLENT

Would you recomend this program to others Y/N \_\_\_\_

Milwaukee Area ATARI Users Group  
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User group meets the 3rd Saturday of each month beginning at 3:30 PM.  
Meetings are held in the community room of the Waukesha State Bank located  
at 110 Madison Street, Waukesha.